

REMARKS

Claims 1-21 and 23-33 are pending with claims 1, 9, 23-32 being independent. By the present Amendment, claims 1, 2, 4-10, 12, 21 and 23-33 have been amended and claims 3 and 11 have been canceled. The specification has been amended to include section headings and a reference to the priority application.

Claim Objections – 35 U.S.C. § 132(a)

The Examiner objects to the amendment filed on December 16, 2004 for purportedly introducing new matter. Applicants respectfully submit that the amended claims are supported, for example, by pages 17-19 of the published PCT application. Accordingly, withdrawal of this basis for objection to the claims is respectfully requested.

Claim Rejections – 35 U.S.C. § 112, first paragraph

Claims 1, 9 and 23-32 have been rejected under 35 U.S.C. § 112 first paragraph as purportedly failing to comply with the written description requirement since the Examiner believes they relate to the alleged new matter. Claims 2-8, 10-31 and 33 are also rejected due to their dependency on one of the rejected claims. Applicants respectfully submit that the amended claims and the above remarks overcome this basis for rejecting the claims.

Priority

The attached substitute specification amends the first page of the application to include a reference to the priority application.

Specification

The Examiner contends that the specification is so incomprehensible as to preclude a reasonable search of the prior art and states that the terms “blurred estimate”, “section of a representation” and “blurred terminal section” are not understood. The Examiner also purports ambiguity as between blurring described in

the specification and blurring described in the priority document. Applicants respectfully disagree.

With regard to “blurred estimate,” Applicants respectfully direct the Examiner’s attention to page 17, lines 19-22 and page 18, lines 27-32 of the published PCT application. The amended claims recite blurred estimate “ $b(t)$ ” for clarity.

With regard to “section of a representation,” Applicants respectfully direct the Examiner’s attention to page 8, lines 26-29 of the published PCT application. As can be understood from this paragraph, a section of a representation of a signal is a portion (e.g., snapshot or short section) of a recorded and sampled representation of a signal. The amended claims recite sections such as terminal section “ $r(t)$ ”, a first section “ $S_A(t)$ ” and a second section “ $S_B(t)$ ” of a representation of the signals from one or more transmitters for clarity.

With regard to “blurred terminal section,” the amended claims recite blurred terminal section $r(t) * \rho_A(\tau)$ for clarity. Applicants respectfully direct the Examiner’s attention to page 19, lines 1-3 of the published PCT application.

With regard to “blurring,” Applicants respectfully direct the Examiner’s attention to page 16 lines 30-33 of the published PCT application that describes a convolution to model multi-path effects that is consistent with the text at page 8, lines 15-17 and at page 17, lines 21-22 of the published PCT application and with the text in paragraphs [0055] and [0057] of the priority document.

In addition, the attached substitute specification provides section headings for the application. To facilitate the addition of the section headings, a number of paragraphs from elsewhere in the published PCT application were repeated under the appropriate headings. No new matter has been introduced.

In view of the foregoing, withdrawal of the objections to the specification is respectfully requested.

Claim Objections

The Office Action states that claims 4-8 and 12-22 have not been treated on the merits since they appear to have improper form. More specifically, the Office Action states that multiple dependent claims should refer to other claims in the alternative only. The Examiner is apparently referring to the format of the dependent claims presented prior to the Preliminary Amendment filed with the U.S. national stage application under 35 U.S.C. § 371 that removed the multiple claim dependencies. This basis for objecting to the claims is believed to be overcome by the amended claims herein.

Claim Rejection - 35 U.S.C. § 112, second paragraph

The Examiner rejects claims 1-9 and 23-30 as being indefinite due to use of such terms as “blurred” for the same reasons described above in connection with rejection of the claims under 35 U.S.C. § 112, first paragraph. The basis for rejecting the claims is believed to be overcome by the amended claims herein and the above remarks.

Claim Rejection under 35 U.S.C. § 101

The Examiner states that claims 1, 9 and 23-30 are rejected under 35 U.S.C. § 101 because the claimed invention is not supported by a specific and substantial asserted utility. Applicants respectfully disagree. The published PCT application describes the utility of the invention on page 8, lines 22-24 (i.e., more accurately removing contribution of selected signals) and on page 10, lines 14-24 (i.e., overcoming the hearability problem). In addition, the independent claims each recite finding a time offset. Applicants therefore respectfully request withdrawal of this basis of rejection.

Claim Rejection under 35 U.S.C. § 102(b)

The Office Action rejects claims 1, 9 and 22-26 under 35 U.S.C. § 102(b) as being anticipated by Ottosson et al (WO 00/55992) hereinafter “Ottosson et al”.

Applicants respectfully submit that Ottosson et al does not disclose at least steps (b), (c), (d), (e) or (f) in the independent claim 1 nor similar recitations in the independent claims 9 and 23-33.

Step (b) of claim 1 recites creating a first section of a representation of the signal transmitted by a first of a plurality of transmitters, and a second section of a representation of the signal transmitted by a second of a plurality of transmitters. Ottosson et al, by contrast, carries out a process solely in the terminal using an estimate from a mathematical model of the channel profile and does not create sections from representations of signals from the transmitters. In other words, the sections created as recited in claim 1 are actual measurements while the mathematical model employed by Ottosson et al is merely an approximation versus a measurement.

Ottosson et al does not teach steps (c) or (d) recited in claim 1. Step (c) recites creating a first function dependent on both the first section and a terminal section. Step (d) recites creating a second function dependent on the first section. As stated above, Ottosson et al fails to disclose a step (b) for creating the first section as claimed.

Ottosson et al does not teach step (e) recited in claim 1. If a subtraction occurs in Ottosson et al, it does not involve a blurred estimate as recited in step (c). Likewise, Ottosson et al does not teach step (f) recited in claim 1 since the recited blurred residual representation involves subtracting a blurred estimate that is dependent on a first section that Ottosson et al fails to teach.

The Office Action relies on Fig. 4 of Ottosson et al to purportedly teach the invention recited in claim 1 but this figure requires creation of a channel estimate (402) as mentioned above which is difficult to achieve. The present invention advantageously obviates the need for such a channel estimate. Further, Ottosson et al makes an estimate and uses a mathematical model. By contrast, the claimed invention employs two measurements in two different places (i.e., creating first and second sections with respect to first and second transmitters) and employs one of the measurements (i.e., the first section) to estimate the signal received from the other (e.g., second transmitter).

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In view of the foregoing, withdrawal of the rejection of claims 1, 9 and 23-26 under 35 U.S.C §102(b) is respectfully requested.

Conclusion

In view of the amendments and arguments set forth above, Applicants submit that the present application is in condition for allowance and would appreciate early notification of the same.

Invitation for a telephone interview

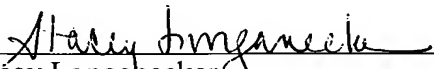
The Examiner is invited to call the undersigned at (202) 659-9076 if further issues remain with allowance of this case.

Deposit Account Authorization

Although no fee is believed due by submission of this paper, authorization is hereby made to charge any fees due or outstanding, or credit any overpayment, to Deposit Account No. **18-2220** (Order No. 47944).

Respectfully Submitted,

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